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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,300	09/13/2001	Helmut Eckert	0147-0229P	2392

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
YAEN, CHRISTOPHER H	
ART UNIT	**PAPER NUMBER**
1643	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,300	ECKERT ET AL.	
	Examiner	Art Unit	
	Christopher H. Yaen	1643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,7-9,12 and 14-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7-9,12 and 14-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Re: Eckert *et al*

1. The amendment filed 6/22/2005 is acknowledged and entered into the record. Accordingly, claims 2-6,10-11, and 13 are canceled without prejudice or disclaimer, and claims 15-24 are newly added.

2. Claims 1,7-9,12,14-24 are pending and examined on the merits.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections Maintained - 35 USC § 102

4. The rejection of claims 1,7-9,12,14, and now newly added claims 15,17,18, and 20-23 under 35 USC § 102(b) as being anticipated by Ragnhammer *et al* (Int. J. Cancer 1993; 53:751-758) is maintained for the reasons of record. Applicant argues that the cited reference does not anticipated the instant invention because each and every limitation of the claimed invention has not been taught. Specifically applicant argues that Ragnhammer *et al* teach a high dose administration (i.e. 400 mg) of the claimed antibody in conjunction with an adjuvant (i.e GM-CSF), while the instant invention is drawn to a low dose antibody composition with an adjuvant that is suitable for a vaccine formulation. Applicant additionally argues that the portion relied upon by the examiner relates to immediate allergic reactions or ITAR wherein there is a dose of 1.0 mg of the antibody but fails to combine with an adjuvant. Applicant's arguments have been carefully considered but are not deemed persuasive to overcome the rejection of record.

The claims are drawn to a pharmaceutical composition comprising an EP-Cam antibody and an adjuvant. Subsequent claims limit the dosage of the EP-Cam antibody to 0.01-4 mg. The claims are also drawn to a method of treating cancer comprising the administration of the said pharmaceutical composition.

Contrary to what applicant has argued, Ragnhammer *et al* taught all of the limitations of the claimed invention. Specifically, Ragnhammer *et al* taught a pharmaceutical composition comprising an EP-Cam antibody within the dosage of 0.01-4 mg (specifically, 2-4mg daily) in conjunction with an adjuvant. No wherein within the claims does it specifically limit the number of times the administration may take place. Thus, contrary to applicant's arguments, the administration of the EP-Cam antibody falls within the claimed "low" dose range. Moreover, Ragnhammer *et al* indicated that *if* ITAR was present, a modification to the dose regimen to 2-4 mg of antibody daily was indicated. This modification was not an assessment of ITAR, but was an indication on dose requirements in the presence of ITAR. Thus one of skill in the art would presume that the anti-EP-Cam antibody was still administered in conjunction with the GM-CSF as claimed.

Newly added claims are anticipated because the claims as currently interpreted do not preclude multiple administration at the claimed lower dose range of 0.01-4 mg. Although the preamble of the claim indicates "an individual dose", this dose not mean a single total dose of 0.01-4 mg.

Therefore, the rejection of claims under 35 USC § 102(b) is maintained for the reasons of record.

New ~~Arguments~~ Rejection

Claim Rejections - 35 USC § 112, 1st paragraph

5. Claims 1,7-9,12, and 14-24 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a pharmaceutical composition comprising an anti-EP-Cam antibody and an adjuvant or a method of treating cancer comprising the administration of the said pharmaceutical composition, does not reasonably provide enablement for a pharmaceutical composition comprising an anti-EP-Cam antibody and an adjuvant or a method of treating cancer comprising the administration of said pharmaceutical composition, wherein the pharmaceutical composition is useful as a formulation of a vaccine (i.e. a prophylactic composition). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Reasonable guidance with respect to preventing any cancer (not just lymphomas) relies on quantitative analysis from defined populations which have been successfully pre-screened and are predisposed to particular types of cancer. This type of data might be derived from widespread genetic analysis, cancer clusters, or family histories. The essential element towards the validation of a preventive therapeutic is the ability to test the drug on subjects monitored in advance of clinical cancer and *link* those results with subsequent histological confirmation of the presence or absence of disease. This irrefutable link between antecedent drug and subsequent knowledge of the prevention of the disease is the essence of a valid preventive agent. Further, a

preventive administration also must assume that the therapeutic will be safe and tolerable for anyone susceptible to the disease. While various antibody-based therapeutics have shown some promising efficacy in the therapy of cancer, (Weiner L.M., Seminars Oncology, Vol. 26, No. 4, Suppl 12, pages 41-50, 1999), a recent review of such therapies did not indicate nor suggest that such therapies would be successful in the prevention of cancer. Furthermore, Weiner teaches (page 43) that one of the obstacles to successful monoclonal antibody therapy is insufficient target specificity. Thus, for an antibody to be somewhat successful there must be a target. In the case of the instant invention, the target is the CD20 antigen on B-cells, and the specification fails to contemplate the safety considerations in administering preventive monoclonal antibodies that would target all B-cells expressing the CD20 antigen in populations which might be susceptible to a central nervous system lymphoma.

The specification of the instant invention teaches that the instant invention can be useful in the treatment of a cancer comprising the administration of an anti-EP-Cam antibody in conjunction with an adjuvant. However, the specification fails to provide any guidance in the form of working examples of demonstration from the prior art that a pharmaceutical composition comprising an anti-EP-Cam antibody and an adjuvant can be used as a prophylactic compound or in the prevention of cancer as encompassed by claims. Therefore, in the absence of objective guidance or art that overcomes the unpredictable nature of preventing cancer or compounds with the intended use of prevention, the specification is not enabling for vaccines for treating cancer or methods of using a compound that is intended for the prevention of cancer.

It is noted that if applicant amends the claims to remove the "vaccine" language, this rejection can be obviated.

Conclusion

6. No claim is allowed.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H. Yaen whose telephone number is 571-272-0838. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms, Ph.D. can be reached on 571-272-0832. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Yaen
Art Unit 1643
August 31, 2005

SHEELA HUFF
PRIMARY EXAMINER